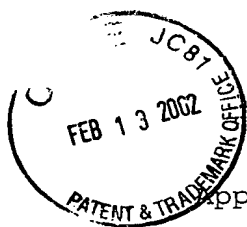


PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant: Ashley J. Birkett)

Serial No.: 09/931,325)

Filed: August 15, 2001)

For: Malaria Immunogen and)
Vaccine)

5
Attorney Docket:
ICC-103.1 US
83502

Reply To Notice To File Missing Parts of
Nonprovisional Application to Comply With the
Requirements for Patent Applications Containing
Nucleotide Sequence and/or Amino Acid Sequence Disclosures

Commissioner for Patents
Washington, D.C. 20231
Attn: Box Sequence

Sir:

In response to the Notice to File Missing Parts of Nonprovisional Application in connection with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures dated October 26, 2001, and pursuant to the requirements of 37 C.F.R. 1.821(e) a computer readable form of the Sequence Listing (file: ICC103P1.app in ASCII format copied onto the accompanying diskette form PatentIn Ver. 2.1 on this date) for the subject case, is enclosed. A paper copy of the Sequence Listing is also enclosed (pages 1 through 42).

The sequence listing information recorded in the accompanying computer readable form is identical to the sequence listing information recorded in the previously filed paper copy of the "Sequence Listing," as required under 37 C.F.R. § 1.821(f), and furthermore, includes no new matter pursuant to 37 C.F.R. § 1.821(g).

Additionally, in further compliance with this Notice, a signed oath or declaration was filed on November 7, 2001.

No further fee or petition is believed to be necessary. However, should any further fee be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

Respectfully submitted,

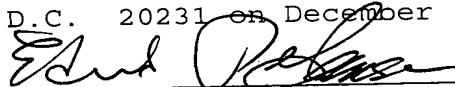


Edward P. Gamson
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Welsh & Katz, Ltd.
120 South Riverside Plaza
22nd Floor
Chicago, Illinois 60606
(312) 655-1500

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify that this Statement under 37 C.F.R. 1.825 (a) and 1.821(f), together with the stated enclosures, is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Attention: Commissioner for Patents, Washington, D.C. 20231 on December 11, 2001.

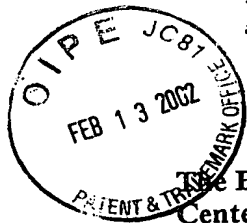


Edward P. Gamson

0590
0905

**BIOTECHNOLOGY
SYSTEMS
BRANCH**

RAW SEQUENCE LISTING
ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/931,325
Source: OIPE
Date Processed by STIC: 9/6/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

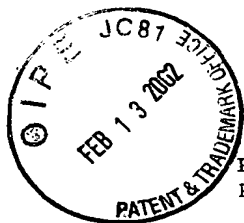
The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE



RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/931,325

DATE: 09/06/2001
TIME: 13:29:17

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Output Set: N:\CRF3\09062001\I931325.raw

3 <110> APPLICANT: Birkett, Ashley J.
5 <120> TITLE OF INVENTION: MALARIA IMMUNOGEN AND VACCINE
7 <130> FILE REFERENCE: 4564/83502 ICC-103.1
9 <140> CURRENT APPLICATION NUMBER: US/09/931,325
10 <141> CURRENT FILING DATE: 2001-08-15
12 <150> PRIOR APPLICATION NUMBER: 60/225,843
13 <151> PRIOR FILING DATE: 2000-08-16
15 <160> NUMBER OF SEQ ID NOS: 186
17 <170> SOFTWARE: PatentIn Ver. 2.1

Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

429 <210> SEQ ID NO: 35
430 <211> LENGTH: (27) 28 shown
431 <212> TYPE: DNA
432 <213> ORGANISM: Hepatitis B virus
434 <400> SEQUENCE: 35

E--> 435 cgcgagctcc cagcgtctag agacctag

28

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/931,325

DATE: 09/06/2001

TIME: 13:29:19

Input Set : A:\Icc103-1.app

Output Set: N:\CRF3\09062001\I931325.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number
L:435 M:252 E: No. of Seq. differs, <211>LENGTH:Input:27 Found:28 SEQ:35